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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,086	07/11/2001	Yukio Ichikawa	33791	6838

116 7590 04/07/2006

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EXAMINER

BHATTACHARYA, SAM

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 04/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/889,086	Applicant(s) ICHIKAWA ET AL.	
	Examiner Sam Bhattacharya	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6 is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 11-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Mansell et al. (US 5,223,844).

Regarding claim 11, Mansell discloses a communication system including an on-vehicle terminal having a first communication means for communication with an emergency response center 150, at least one state sensor for detecting an abnormal state of a vehicle 102, and a mobile 100 terminal including second communication means for communication with the on-vehicle terminal, where the emergency response center includes means for distinguishing whether information is transmitted from the on-vehicle terminal or whether information is transmitted from the mobile terminal when the emergency response center receives and restores information transmitted from a plurality of types of on-vehicle communications systems according to a predetermined communication protocol (because a particular type of assistance is needed when the vehicle user sends the alert). See FIG. 1, col. 2, lines 31-54 and col. 6, line 54 – col. 7, line 7.

Regarding claims 12 and 13, that the on-vehicle and mobile terminals include location information detecting means (GPS). See col. 7, lines 8-26.

Regarding claim 14, the on-vehicle and mobile terminals include central processors 352 and processor within the vehicle. See FIG. 3.

Regarding claim 15, the on-vehicle and mobile terminals include displays 340D and displays below the dashboard. See FIGS. 2A and 5.

Regarding claim 16, the mobile terminal includes data retaining means 210 and the on-vehicle terminal includes location information detecting means (GPS).

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-4 and 7-10, as best understood in view of the rejection under 35 U.S.C. 112, 2nd paragraph, above, is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. (JP Patent 11-312285, Machine Translation) in view of Tognazzini (U.S. Patent 5,914,675), and further in view of Mansell et al. (US 5,223,844).

As to claim 1, Figures 1-3 in Yoshida show an on-vehicle communication system including first radio communication means 23 for transmitting predetermined data having state information in the detection of an abnormal state, the predetermined location information and a terminal ID to an information service center on occurrence of a predetermined event,

wherein said on-vehicle communication system comprises an on-vehicle terminal main unit, a mobile terminal 36 detachable from said on vehicle terminal main unit, wherein said mobile terminal 36 includes voice communication means 36,

wherein said on-vehicle terminal main unit and said mobile terminal can communicate with each other via second radio communication means 35; and

wherein if the mobile terminal has finished having the first radio communication means transmit the predetermined data to the information service center, the mobile terminal has the second radio communication means transmit data for voice communication to the information service center via the on-vehicle terminal main unit (“first radio-transmission means b which said radio means transmits emergency intelligence to said emergency relief center in data communication from said car at the time of occurrence of the accident. It is characterized by having at least the second radio-transmission means which makes voice communication possible in said emergency relief center from said car by automatic change at the time of the data communication termination by said first radio-transmission means.” See paragraphs [0005], [0013] to [0015], [0022] and [0025] and Figures 1-3).

Yoshida does not disclose means for detecting a relative distance between said on-vehicle terminal main unit and said mobile terminal, wherein said means switches a main system for communications of said on-vehicle communication system. The Tognazzini reference teaches means for detecting a relative distance between an on-vehicle terminal main unit and a mobile terminal, wherein said means switches a main system for communications of said on-vehicle communication system. See FIGS. 1 and 2B, and col. 4, lines 20-25, col. 7, lines 28-32, col. 8, lines 59-63 and col. 9, lines 7-11.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Yoshida to have means for detecting a relative distance between an on-vehicle terminal main unit and a mobile terminal, wherein said means

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switches a main system for communications of said on-vehicle communication system, as taught by Tognazzini, in order to help rescuers in locating the area/region of a crash/emergency and in communicating with users of the on-vehicle communication system in an emergency.

The combination of Yoshida and Tognazzini fails to teach that the radio communication means in the on-vehicle terminal main unit communicates with the information service provider. However, in an analogous art, Mansell discloses a vehicle communication system in which a radio communication means in the on-vehicle terminal main unit communicates with the information service provider (control center 150). See FIG. 1, col. 2, lines 31-54. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Yoshida and Tognazzini by incorporating the feature taught in Mansell for the purpose of providing a way for the vehicle to communicate the abnormal state directly to the information service provider even in the absence of a mobile user.

As to claim 2, the Tognazzini reference discloses “the GPS receiver 16 may be integrated as part of the emergency locator device, where the emergency locator device 10 operates as an integrated wireless telephone having the GPS receiver 16” (Col. 4, lines 30-33).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Yoshida-Tognazzini-Mansell wherein the system further comprises location information detecting means as a function of said mobile terminal, as further taught by Tognazzini, in order to implement the system as a portable unit suitable for hand-held use for survivors of a crash.

As to claim 3, the Tognazzini reference discloses “the GPS receiver 16 may be integrated as part of the emergency locator device, where the emergency locator device 10 operates as an

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integrated wireless telephone having the GPS receiver 16” (Col. 4, lines 30-33). “The emergency locator device includes a GPS receiver interface, a crash sensor or manual triggering device” (Col. 3, lines 65-67).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Yoshida-Tognazzini-Mansell wherein the mobile terminal further includes a function of the state sensor means, as further taught by Tognazzini, in order to implement the system as a portable unit suitable for hand-held use for survivors of a crash.

As to claim 4, the Tognazzini reference discloses “the emergency locator device includes a GPS receiver interface, a crash sensor or manual triggering device” (Col. 3, lines 65-67). “The GPS receiver 16 may be integrated as part of the emergency locator device, where the emergency locator device 10 operates as an integrated wireless telephone having the GPS receiver 16” (Col. 4, lines 30-33).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Yoshida-Tognazzini-Mansell wherein the mobile further includes functions of the location information detecting means and the state sensor means, as further taught by Tognazzini, in order to implement the system as a portable unit suitable for hand-held use for survivors of a crash.

As to claim 7, as cited in claim 1, Figures 1-3 in Yoshida show an on-vehicle communication system including location information detecting means 22; state sensor means 21 for detecting an abnormal state and outputting state information; means 24 for recording location information having time information and latitude/longitude information of the location

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information obtained by the location information detecting means 22 at each point; first radio communication means 23 for transmitting predetermined data having the state information, the predetermined location information and a terminal ID to an information service center 2 on occurrence of a predetermined event; and voice communication means 36,

wherein said on-vehicle communication system comprises an on-vehicle terminal main unit and a mobile terminal 36 detachable from said on-vehicle terminal main unit, and

wherein said mobile terminal 36 includes voice communication means 36, and

wherein said on-vehicle terminal main unit and said mobile terminal can communicate with each other via second radio communication means 35.

However, it does not disclose the mobile terminal includes data retaining means for temporarily storing data and the data retaining means temporarily stores data updated as required while the vehicle is traveling. The Tognazzini reference (Figure 1) discloses “the GPS receiver 16 thus determines a current location of the emergency locator device 10 within an accuracy of +/-100 meters and supplies the current location information to the GPS interface 14 for storage in memory” (Col. 4, lines 54-57). “If the received data is GPS data, the control processor 24a accesses the previously-stored GPS data from the memory 38a in step 104, and compares the received GPS data with the stored GPS data in step 106. If the variations between GPS data indicate that the device 10 has moved at least a predetermined distance, for example, a distance $L=100$ meters, the control processor 24a updates the memory 38a in step 108” (Col. 7, lines 24-32).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Yoshida wherein the mobile terminal includes

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data retaining means for temporarily storing data and the data retaining means temporarily stores data updated as required while the vehicle is traveling, as taught by Tognazzini, so that if the mobile terminal becomes separated from the vehicle during a crash, the control processor in the mobile terminal can still provide location and vehicle status information to rescue teams by accessing the memory.

The combination of Yoshida and Tognazzini fails to teach that the radio communication means in the on-vehicle terminal main unit communicates with the information service provider. However, in an analogous art, Mansell discloses a vehicle communication system in which a radio communication means in the on-vehicle terminal main unit communicates with the information service provider (control center 150). See FIG. 1, col. 2, lines 31-54. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Yoshida and Tognazzini by incorporating the feature taught in Mansell for the purpose of providing a way for the vehicle to communicate the abnormal state directly to the information service provider even in the absence of a mobile user.

As to claim 8, Yoshida-Tognazzini-Mansell discloses the on-vehicle communication system according to claim 7. The Tognazzini reference further discloses the data retaining means stores higher priority emergency information data to be transmitted to the information service center, and the emergency information data stored in the data retaining means can be taken out of the vehicle together with said mobile terminal in the event of an emergency ("the GPS receiver 16 thus determines a current location of the emergency locator device 10 within an accuracy of +/-100 meters and supplies the current location information to the GPS interface 14 for storage in memory" (Col. 4, lines 54-57). "Finally, the telephone portion of the emergency

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locator device 10 and the emergency receiver each include a non-volatile memory 38 that stores a predetermined number corresponding to a rescue station” (Col. 5, lines 20-23). “If the emergency locator device 10 becomes separated from the rest of the vehicle during a crash, the control processor 24a can still provide location and vehicle status information to rescue teams by accessing the memory 38a” (Col. 5, lines 56-60)).

As to claim 9, Yoshida-Tognazzini-Mansell discloses the on-vehicle communication system according to claim 8. The Yoshida reference further discloses the on-vehicle communication system makes voice communication with the information service center after transmitting the emergency information data to the information service center from the mobile terminal (“when an emergency occurs in a vehicle due to accident, etc., the detailed content of the accident is notified to an emergency aid center by first executing the position information of own vehicle, accident information, and furthermore, such emergency information as vehicle ID and crew ID information, etc., stored in advance are notified through radio data communication by a first radio transmission means 33, and automatically switching the data communication to voice communication by a second radio transmission means 35, when the data communication is completed” (Abstract). “The 2nd radio-transmission means 35 is connected to a handset (or hand free set) 36” (paragraph [0015], line 6)).

As to claim 10, Yoshida-Tognazzini-Mansell discloses the on-vehicle communication system according to claim 9. The Tognazzini reference further discloses communications from the mobile terminal to the service center are made via a communication apparatus different from said on-vehicle communication system associated with said mobile terminal, the communication apparatus existing in the close proximity of said mobile terminal (“the portable device 10 may

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also be used as a conventional wireless telephone during normal operations” (Col. 8, lines 48-50). “The telephone portion of the emergency locator device 10 and the emergency receiver each include a non-volatile memory 38 that stores a predetermined number corresponding to a rescue station” (Col. 5, lines 20-23). “Upon the detection of an emergency trigger, the emergency locator device automatically places a wireless telephone call to a predetermined emergency number and supplies the stored location data and vehicle condition data” (Col. 10, lines 47-51). “If the emergency locator device 10 becomes separated from the rest of the vehicle during a crash, the control processor 24a can still provide location and vehicle status information to rescue teams by accessing the memory 38a” (Col. 5, lines 56-60)).

Allowable Subject Matter

5. Claim 6 is allowed.
6. The following is a statement of reasons for the indication of allowable subject matter: claim 6 is rewritten in independent form to include the allowable subject matter indicated in the previous Office action.

Response to Arguments

7. Applicant's arguments with respect to claims 1-4 and 7-10 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Bhattacharya whose telephone number is (571) 272-7917. The examiner can normally be reached on Weekdays, 9-6, with first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sb


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SUPERVISORY PATENT EXAMINER